

## **Pikmiktalik River salmon counting site surveys**

**Abstract:** A survey to find a site for a salmon weir or counting tower was conducted July 15 and 16, 2002 on Pikmiktalik River, a small system flowing into southern Norton Sound from the Yukon Delta National Wildlife Refuge. Two sites were found that would be suitable for placement of a tower or weir. One site, at 14.412°N, 162° 34.341' W, was at the upper limit of travel for the outboard powered open skiff used for the survey, while the other, at 63° 14.296 N, 162° 34.633 W, was further downriver at a location briefly used for a counting tower during an earlier study. The upper site was difficult to access by boat due to the narrow width and shallow depth of the river, and may be inaccessible during periods of reduced water flow. The water at this site was clear, and the bottom was composed of soft gravel suitable for salmon spawning. Water level fluctuated less than 10 cm due to tidal influence. At low water, the river was 16 m wide and 76 cm deep, with a water velocity of about 0.63 m/sec. Installing a weir or counting tower at or near this site appeared to be feasible. The lower site was much easier to access by boat, and would probably be accessible even during periods of reduced water flow. This site is also only about 150 meters by trail and 400 meters by river from the Foxy family's subsistence fish camp. The water was clear, although a slight tannic stain was detectable during high tide. While some of bottom is covered with muddy silt, there are also areas with gravel suitable for counting salmon. Water depths were about 40 cm at low tide, and rose to about 130 cm at high tide. River width at this site was about 30 m. Water velocity varied with tide stage, but did not reverse direction or stop. Maximum flow was similar to that measured at the upstream site. Pink *Oncorhynchus gorbuscha*, chum *O. keta* and Chinook *O. tshawytscha* salmon were observed during the survey.

**Citation:** Lean, C., D. Wiswar, T. Roettiger, and S. Fried. 2003. Pikmiktalik River salmon counting site surveys. U.S. Fish and Wildlife Service, Office of Subsistence Management, Fisheries Resource Monitoring Program, Final Report (Study No. 02-020 Phase I). National Park Service, Nome, Alaska.